REMARKS

A. Request for Reconsideration

Applicants have carefully considered the matters raised by the Examiner in the outstanding Office Action but remain of the position that patentable subject matter is present. Applicants respectfully request reconsideration of the Examiner's position based on the Declaration of Mr. Kuroki, the amendments to the specification, the amendments to the claims and the following remarks.

B. The Invention

The present invention is directed to light sensitive compositions and light sensitive planographic printing plate materials composed of an addition polymerizable ethylenically unsaturated monomer, a photopolymerization initiator and a polymer binder. The present invention achieves excellent small dot reproduction, excellent storage stability, reduced sludge on development, high sensitivity and high printing durability.

In one of the novel aspects of the invention, the photopolymerization initiator is composed of two initiators, a compound of Formula 1 and an iron-arene compound.

In another novel aspect of the invention, the photopolymerization initiator is composed of a compound of Formula 2.

C. Specification Amendments

Page 107 has been amended to correct a typographical error. Samples 78 and 79 are not comparative as shown in Table 10 at page 104.

D. Claim Status and Amendments

Claims 1-5 and 7-21 are presented for further prosecution.

Claim 1 has been amended to include the subject matter of claim 6. Claim 6 has been canceled by this amendment. Claim 1 now recites that the photopolymerization initiator is composed of an iron-arene compound and a compound of Formula 1.

E. The Office Action

Claims 1-5, 7-15 and 17-21 had been rejected as being anticipated by Kunida (JP 2002-202595). Claims 6 and 16 had been rejected as being unpatentable over Kunida.

As a result of the addition of claim 6 to independent claim 1, the anticipation rejection against claims 1-5 and 7-9 is moot. Thus, the applicable rejection against claim 1 is the obviousness rejection to claim 6. The anticipation rejection against independent claim 10 remains.

1. Kunida does not teach or suggest a light sensitive composition having a compound of Formula 2 of claim 10

Kunida teaches a light sensitive composition. The Examiner has cited compound X-3 in par. 65 and par. 271 of Kunida as an oxadiazole compound of Formula 1 of claim 1.

The cited oxadiazole compounds of Kunida contain one oxadiazole group. In contrast, the oxadiazole compound of claim 10 contains at least two oxadiazole groups, since m an integer of not less than 2. Thus, the oxadiazole compounds of Kunida are not the oxadiazole compound of Formula 2 of claim 10.

Furthermore, there is no suggestion in Kunida that the photopolymerization initiator should contain two oxadiazole groups.

Applicants respectfully submit that Kunida does not anticipate claim 10 since Kunida does not teach or suggest the oxadiazole compound of Formula 2.

2. It would not be obvious to prepare a light sensitive composition having an oxadiazole compound of Formula 1 and an iron-arene compound based on the teachings of Kunida

In section 4 of the Office Action, the Examiner had recognized that Kunida does not suggest using an iron-arene compound in combination with a compound of Formula 1. However, the Examiner had taken the position that it would be obvious to prepare a composition with this combination based on the teachings of Kunida.

Kunida teaches eight different initiators in par. 8. The Examiner had equated the metallocene initiator with the iron-arene compound of amended claim 1 (see par. 36), and the carbon-halogen initiator with the compound of Formula 1 of claim 1 (see par. 65). Thus, of the eight total initiators of Kunida, only two of the eight initiators are recited in claim 1.

Furthermore, Kunida explains that the most preferred initiators are the hexaaryl biimidazole initiator and the carbon-halogen initiator (par. 104). Kunida therefore teaches away from using the iron-arene compound recited in claim 1.

In addition, Kunida teaches that his initiators can be used singly or in combination (par. 104). Thus, Kunida equates compositions having one initiator and compounds having two or more initiators.

Still further, the Table in par. 269 of the Examples of Kunida teach the use of only one initiator, since only one "X" is employed in compositions 1-15 and 1-18 (see par. 270).

Applicants therefore respectfully submit that the present invention is not obvious based on the teachings of Kunida. First, Kunida provides no suggestion to select the compounds of claim 1 from the eight total initiators of par. 8. Second, Kunida teaches away from the compounds of claim 1, since Kunida teaches in par. 104 that the hexaaryl biimidazole initiator and the carbon-halogen initiator are most preferred. Third, Kunida does not suggest the significance of the simultaneous use of the compounds of claim 1, since Kunida equates compositions having one and two or more initiators in par. 104. Fourth, the Examples of Kunida employ only one initiator as shown in the Table in par. 270.

For the above reasons, Applicants respectfully submit that one of skill in the art would not be motivated to prepare the light sensitive composition of claim 1. It is respectfully submitted that claim 1 is patentable over Kunida.

3. The Declaration of Mr. Kuroki demonstrates the synergistic properties of the light sensitive composition of claim 1

Applicants respectfully submit that the enclosed Declaration of Mr. Kuroki demonstrates that it would not be obvious to employ an iron-arene compound and a compound of Formula 1 based on the teachings of Kunida. Specifically, the Declaration demonstrates the synergistic results obtained by the combination of an iron-arene compound and a compound of Formula 1 of claim 1.

Mr. Kuroki prepared Comparative planographic printing plate material sample C-1 in accordance with Example 3 in the Table at par. 269 of Kunida. Comparative sample C-1 therefore contained 0.2 grams of compound X-3 of Kunida cited by the Examiner (par. 271). Compound X-3 falls within the scope of Formula 1 of claim 1.

Next, Mr. Kuroki prepared Comparative sample C-2 in the same manner as Comparative sample C-1, except that compound X-3 was replaced by 0.2 grams of iron-arene compound I-3 of Sample Nos. 21-25 in Table 3 at page 92 of the present invention.

Inventive sample I-1 was prepared in the same manner as Comparative sample C-1, except that compound X-3 was replaced by 0.1 grams of compound X-3 and 0.1 grams of compound I-3. Inventive sample I-1 is representative of claim 1 (Mr. Kuroki has confirmed that the Declaration contains a minor

typographical error, as "2.0" and 1.0 grams should read "0.2" and "0.1" grams).

Comparative sample C-1, Comparative sample C-2 and Inventive sample I-1 were evaluated for printing durability and small dot reproduction in accordance with the evaluation method described at pages 86-87 of the present invention. The results of these evaluations are illustrated in Table I of the Declaration.

Table I demonstrates the synergistic results exhibited by Inventive sample I-1 compared to Comparative sample C-1 and Comparative sample C-2. For example, one of skill in the art would expect printing durability to be between 70,000-40,000 sheets when combining Comparative samples C-1 and C-2. This is because half the amount of compound X-3 and compound I-3 is used in Inventive sample I-1 compared to Comparative samples C-1 and C-2. Instead, the synergistic combination of the present invention achieves a printing durability of 210,000 sheets, which is about a four-fold increase compared to the expected value of 70,000-40,000. Similarly, one of skill in the art would expect the small dot reproduction percentage to be between 5-7% when combining Comparative samples C-1 and C-2. Instead, the synergistic combination of the present invention achieves a small dot reproduction percentage of 3%, which is superior to the expected value of 5-7%.

In addition to the arguments made in section 2 above, Applicants submit that the present invention is not obvious based on the teachings of Kunida, since the Declaration of Mr. Kuroki demonstrates that then claimed light sensitive material exhibits synergistic results compared to the use of a compound of Formula 1 alone and an iron-arene compound alone. Kunida does not teach or suggest the synergistic results shown in Table I of the Declaration. It is respectfully submitted that claim 1 is not obvious based on the teachings of Kunida.

F. Conclusion

In view of the foregoing and the enclosed, it is respectfully submitted that the application is in condition for allowance and such action is respectfully requested. Should any extensions of time or fees be necessary in order to maintain

this Application in pending condition, appropriate requests are hereby made and authorization is given to debit Account # 02-2275.

Respectfully submitted,

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Encl: Executed Declaration of Mr. Takaaki Kuroki
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